ROTH
PUMP COMPANY

SPECIFICATION FORM FOR 212°F CONDENSATE RETURN STATIONS

Furnish and install as shown on the drawings OR as specified below:

Roth 212°F Condensate Return Station – Model # _____or equal.

(One)(Two) 1 Foot NPSHr Pumps For _____ GPM at _____ PSI at 212°F.
Receiver capacity shall be (20)(35)(60)(100)(180)(250)( ) gallons
Receiver material shall be construction.
Motor(s) shall be for _____ Voltage (60)(50) cycle (1)(3) phase current (drip proof)(TEFC)(TEFC Svr Duty)((Explosion Proof) all- angle construction.
Float switches/mechanical alternator shall be NEMA (1)(4)(7,9).
(Optional) Starter(s) enclosure shall be NEMA (1)(4)(4X)(7,9)(12) with a control voltage of _____.

Unit shall be furnished as a factory package unit and shall include the following components:

Furnish and install as shown on drawings Roth (duplex-simplex) 212°F condensate station.

Unit shall be Roth Model _____ suitable for _____ GPM at _____ PSI discharge pressure when pumping 212°F condensate.

Unit shall be furnished as a factory package unit and shall include the following components:

1. Pump(s) shall be Low NPSH centrifugal or regenerative turbine type with bronze impeller, renewable liners and stainless steel shaft. Pump NPSHr shall be a constant 1 Foot/ 0.3 Meter across the entire operating range. Pump must handle full rated capacity without loss or vapor binding at 1 ft. NPSHr. The pump(s) shall contain a mechanical seal suitable for operation in 212°F water. Pumps shall be constructed so that shaft and impeller are entirely supported by grease lubricated sealed ball bearings.

2. One low-profile steel receiver shall be stated capacity with steel channel bolt-on legs. Receiver shall be of 3/16” steel construction with flat flanged heads and shall be fitted with openings for inlet,
outlet, vent, overflow, gauge glass, thermometer and drain. Low profile receiver shall be mounted at a
height to provide one foot average suction head.

3. Provide Roth safety vapor release assembly to allow drain of overflow if condensate temperature exceeds 212°F.

4. Provide pressure gauges, complete with siphon and cock, mounted in the pump discharge.

5. Provide gauge glass and thermometer, mounted in the receiver.

6. Provide all piping between receiver outlet and pump suction complete with self cleaning “L” type strainers with flanged blow-off outlet and gate valves. Pipe, strainers, and valves must be sized for less than 3 ft/second velocity liquid flow at maximum pump capacity and specified operating head.

7. Motor(s) shall be sized to be non-overloading at any working pressure below design pressure.

8. Motor/pump coupling is to be Woods with suitable coupling guard to meet current OSHA regulations.

9. One float switch/mechanical alternator.

   For single pump stations the float switch shall be 2-pole Square D or equal suitable for across-the-line starts on single phase current up to 1 HP load, direct actuated by float and float rod.

   For two pump stations the mechanical alternator shall be 2-pole Square D or equal to select first one pump and then the other and arranged to start the second pump if the first pump cannot handle peak returns.

10. (Optional) Magnetic starter(s) with HOA switch(es), disconnect(s), and control transformers shall be factory mounted in one enclosure and wired to the motors.

11. All of the above to be furnished as a complete package unit, factory assembled, piped, wired and ready for connection to services at the building.

GENERAL REQUIREMENTS

Each bidder’s written proposal shall include the equipment and materials as specified herein as their base bid. However, if the bidder desires to submit one or more alternate proposals, a summary of advantages to the purchaser, with complete descriptive, technical, dimensional, and price data, shall be submitted in writing for each proposal. Alternate proposals will not be given consideration if adequate information is not included.

Any exception to the specification shall be clearly stated in writing. If any of the requirements cannot be fulfilled, the bidder shall state his reasons in detail and propose a reasonable alternate. If no exceptions are taken, it will be understood that the bidder’s proposal is based on strict conformance to all requirements of the specification and related attachments.